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IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF HAWAII

UNITED STATES OF AMERICA, and ) NO. CV 06-00140 BMK  
DEPARTMENT OF HEALTH, STATE OF )  
HAWAI`I, )  
Plaintiffs, ) FIRST AMENDED CONSENT DECREE;  
 ) APPENDIX F2  
 )  
v. )  
 )  
 )  
JAMES H. PFLUEGER; PFLUEGER )  
PROPERTIES; AND PILA`A 400 LLC, )  
 )  
Defendants. )  
 )

- 3.04 PRE-PLANTING HERBICIDE FOR RE-PLANTING: Pre-planting herbicide shall be Round-Up or equal.
- 3.05 PRE-EMERGENT WEED CONTROL FOR RE-PLANTING: Pre-emergent herbicide shall be Treflan R , Dymid R, Ronstar-G, Eptam, Vegetex, Enide R, or approved equal. Contractor shall verify pre-emergent herbicide compatibility with plants to be planted. Contractor shall bring any questionable plants and/or pre-emergent herbicides to the attention of the Landscape Architect for a decision prior to application. The Contractor shall apply pre-emergent herbicide in strict conformance with the manufacturer's recommendations, including application methods and rates.
- 3.06 POST-EMERGENT WEED CONTROL FOR MAINTENANCE: Post-emergent herbicide shall be Barmac (MSMA), Tri-Power, Basagran T/O, Assist, Lontrel, Venture, Poast Ultra, Merge, Amitrol, Ignite, Princep Nine-T, Simadex, Lorox, Linuron, Gramoxone, Devrinol, Weed-B-Gon, Envoy, Reward, Ornamec, Grass-B-Gon, Finale, Roundup, Manage, Scythe, Vantage, Brush-B-Gone, or approved equal. Contractor shall verify post-emergent herbicide compatibility with maintained plants. Contractor shall bring any questionable weeds and plants and/or post-emergent herbicides to the attention of the Landscape Architect for a decision prior to application. The Contractor shall apply post-emergent herbicide in strict conformance with the manufacturer's recommendations, including application methods and rates. The Contractor shall exercise extreme care in application of broad-spectrum herbicides that are poisonous to the desired plants to be retained and maintained.
- 3.07 WATER: Unless noted otherwise, a source for potable and irrigation water will be readily available to the Contractor at no additional expense.
- 3.08 MISCELLANEOUS MATERIALS FOR RE-PLANTING:
- A. Tree Guys:
1. Anchors: Anchors shall be 1-inch galvanized pipe, 3 feet long.
  2. Wires: Wires shall be 1/8 inch flexible galvanized cable.
  3. Hose Collars: Hose collars shall be fabric-reinforced rubber hose, flat black color.
  4. Tubing: Tubing shall be polyethylene, grey, 1/2 inch diameter, when guying occurs in lawn areas.
  5. Cable Clamps: Cable clamps shall be galvanized.

6. Turnbuckles: Turnbuckles shall be 6-inches long, 5/16-inch in diameter, open turnbuckle type, 4-1/4-inch take up, all galvanized, weldless, drop-forged steel, galvanized, with eye and fittings.
7. Tree Trunk Protector: Tree trunk protector shall be polyethylene, grey, individual wraps or in spiral coil.

B. Tree Stakes:

1. Stakes: Stakes shall be 2 inches by 2 inches by 8 feet rough construction grade redwood or douglas fir with chamfered top and pointed bottom, or approved equal.
2. Ties: Ties shall be fabric-reinforced, corded, rubber straps. Fasten to stake as noted on Drawings.

C. Markers: Markers shall be made of plastic surveyor tape, with a bright color, minimum 2 feet long. Use the same color throughout project.

- 3.09 GRAVEL FOR REPAIR OF ROADWAYS AND TRAILS: Gravel shall be minimum 3/4-inch (passing through square opening or sieve) aggregate.
- 3.10 ROCK FOR REPAIR OF ROCK CHECK DAMS: Rock shall be 12-inch nominal minimum diameter stone.
- 3.11 FABRIC FOR REPAIR OF ROCK CHECK DAMS: Fabric shall be Amoco 4547 non-woven geo-textile or approved equivalent.
- 3.12 GROUT FOR REPAIR OF SOIL NAIL WALL FACING: Grout shall contain aggregate, Portland cement, fly ash, water, water reducing admixture, and retarder admixture. Coarse aggregate shall be ACI Gradation No. 2. Portland cement shall be Type 1. Percentages of grout mixture shall be approximately, by weight: 46-percent coarse aggregate, 26-percent fine aggregate, 16-percent Portland cement, 2-percent fly ash, and 8.5-percent water. Add water reducing admixture and retarder admixture to grout mixture per manufacturer's instructions.
- 3.13 INSECT CONTROL FOR PLANT MAINTENANCE: Plant insecticides shall be Malathion, Rotenone, Neem, Horticultural Spray Oil, Systemic Insecticide Tree Bullets, Azatin, Talstar, Sevin, Tempo, DeltaGard, Tame, Marathon, Demand, Aliette, Agribrom, Cycocel, Orthene, Cygon, Spectracide or approved equal. Use of Dursban will not be allowed. Contractor shall verify compatibility with maintained plants. Contractor shall bring any questionable weeds and plants and/or insecticides to the attention of the Landscape Architect for a decision prior to application. Contractor shall apply insecticides in strict conformance with the manufacturer's recommendations, including application

methods and rates. Contractor shall exercise extreme care in the application of broad-spectrum insecticides that are poisonous to animals and humans.

#### PART 4 – CONTRACTOR EXECUTION AND MAINTENANCE PRACTICES

4.01 PRE-PLANTING WEED CONTROL: The Contractor shall apply pre-planting herbicides to visible weeds, before and after soil placement.

#### 4.02 PROTECTION:

- A. The Contractor shall protect planted areas and plants against trespassing and damage at all times. If any plants are damaged, treat or replace as directed by the Landscape Architect.
- B. The Contractor shall not execute work in or over prepared plant areas or adjacent to planting without proper safeguards and protection.

#### 4.03 SOIL AND DRAINAGE CONDITIONS:

- A. The Contractor will notify the Landscape Architect in writing of soil or drainage conditions encountered during planting operations which are detrimental to growth of plant material. The Contractor shall submit a cost proposal to the Landscape Architect for correction of the problem. The Contractor shall obtain approval from the Engineer before proceeding with work.
- B. If drainage conditions of plant pits appear unsatisfactory, test drainage by filling with water. The Contractor will bring to the attention of the Landscape Architect conditions permitting the retention of water in planting pit for an excessive period of time. The Contractor shall submit a cost proposal to the Landscape Architect for the correction of the problem. The Contractor shall obtain approval from the Landscape Architect before proceeding with work.

#### 4.04 HANDLING PLANTS FOR RE-PLANTING:

- A. The Contractor shall handle plants in a manner to avoid any damage to the plants.
- B. The Contractor shall protect plants at all times from sun or drying winds. If plants cannot be planted immediately upon delivery, keep plants in the shade, protect the plants, and water the plants adequately.
- C. The Contractor shall plant relocated trees within 24 hours after they are removed from their original site.

#### 4.05 PLANTING PITS FOR RE-PLANTING:

##### A. Planting Pits:

1. Planting pits shall consist of excavated round holes twice the diameter and 1-1/2 times the depth of the root ball/container.
2. The sides and bottom of the planting pit holes shall be scarified.

##### B. Backfilling:

1. Backfill the planting holes with the special backfill mix herein specified.
2. Water-settle backfill thoroughly or compact by other acceptable method prior to planting, so that plants do not settle.

##### C. Fertilizer Tablets: Prior to filling each planting hole with backfill mix, place fertilizer tablets in holes per manufacturer's written recommendations.

#### 4.06 PLANTING OPERATION FOR RE-PLANTING:

##### A. General:

1. Do not plant during unfavorable weather.
2. Ensure that soil is at an optimum moisture content for planting. Do not plant in dry or muddy soil.

##### B. Container and Larger Plants:

1. Do not lift or handle container plants by tops, stems, or trunks at any time.
2. Set plants so that, when settled, the natural grade in the container is 2 inches above finished grade of other planting beds.
3. Watering Basins: Form a circular earth basin centered on the stem of each plant, with the rim of the basin 3 inches above the grade at the stem. Do not form watering basins around trees in lawn areas. Continue ground cover planting through watering basins.
4. Install plants immediately after the containers are cut, and remove containers from the site so as not to present a hazard to persons using the area.

5. Upon completion of planting operations, and again just prior to final inspection, lightly cultivate and neatly rake soil between plants. Leave basins around plants unless otherwise specified or directed by the Landscape Architect.
  6. Staking and Guying: Immediately after planting, stake and/or guy all trees as necessary. Install tree trunk protector on all trees.
- C. Hydromulch Grassing with Stolons (if stolons are utilized):
1. On the moist prepared surface, evenly distribute grass stolons.
  2. After stolonizing, cover area evenly with hydromulch (excluding grass seed) at the minimum rate of 25 lbs. per 1,000 sq. ft. to completely cover the stolons and soil.
  3. Apply water following mulching in such quantities as to moisten the soil and mulch, and to insure proper growth, yet prevent erosion damage to the planted areas.
- D. Pre-emergent Weed Control: Immediately after planting, apply pre-emergent weed control material to planted areas which will not be seeded.
- 4.07 TREE STAKING FOR RE-PLANTING: Double-stake 15- and 25-gallon trees, except multi-trunk trees. Single stake 5-gallon trees.
- A. Set stakes at right angles to the prevailing wind.
  - B. Set stakes plumb.
  - C. Securely nail rubber straps to stakes using ring shank nails.
  - D. Set up a sample stake and ties, and obtain the Landscape Architect's acceptance prior to installing tree stakes and ties.
- 4.08 TREE GUYING FOR RE-PLANTING: Contractor shall install guys on all field stock and all boxed trees.
- A. Neatly form hose and cable collars to prevent any bare cable from chafing against the tree trunk or branches.
  - B. Do not leave sharp cable ends protruding.
  - C. Install grey polyethylene marker tubing on guy wires when planting in lawn areas.

4.09 PRUNING FOR RE-PLANTING:

- A. Prune plants only at the time of planting, and according to standard horticultural practice, to preserve the natural character of the plant and to accomplish its use in the landscape design.
- B. Remove dead wood, suckers, and broken or badly bruised branches.
- C. Remove only dead, broken, or rubbing branches on flowering specimen trees and shrubs. Remove other branches only as directed by Landscape Architects.
- D. Use only clean, sharp tools.
- E. Immediately after planting operations are complete, dress off beds and pits to achieve a neat appearance.

4.10 CLEANUP AFTER RE-PLANTING AND AFTER MAINTENANCE OPERATIONS: Remove cans, surplus materials, and other debris from site. Neatly dress and finish planting areas. Flush walks, paved areas, and similar surfaces clean to the satisfaction of the Landscape Architect. Flushing water shall be prevented from entering State waters by controlling the amount of water use such that water will be absorbed into the ground before it reaches State waters, or placing a temporary "dam" to collect and prevent flushing water from reaching State waters.

4.11 PLANT MAINTENANCE:

- A. The Contractor shall maintain all plants and planted areas in optimum growing condition and appearance.
- B. Contractor maintenance includes, but is not limited to:
  - 1. Protection of areas susceptible to traffic by erecting barricades immediately until planting is firmly established.
  - 2. Provision of temporary irrigation as needed for all planted areas. Irrigation system to shrubs and trees shall be on a separate system from the grass. Regular irrigation of grassed areas will be limited to the plant establishment period only. After grass has been established, irrigation shall be reduced to help prevent undesirable plants from being established. Drip irrigate tree and shrub planting as required to insure active growth, keeping areas moist but not saturated. Regulate irrigation as necessary to avoid erosion and rill creation.

3. Fertilizing of plants and grass as needed in accordance with the manufacturer's recommendation. Contractor shall exercise proper caution with fertilizer handling and dosing, and take measures necessary to avoid plant burn.
4. Keeping planting areas free of weeds and undesirable grasses through weeding and/or application of post-emergent herbicide when required. Contractor shall keep planting areas neat and free from debris at all times. Weeding shall consist of removing the entire root system. Dispose of weeds in appropriate trash containers.
5. Inspection of all plants for disease or insect damage. Treat affected plants immediately, or replace affected plants.
6. Removal of damaged or diseased growth from trees and shrubs.
7. Immediate removal of dead or dying plants not in a vigorous thriving condition. Replace plants (that are removed) with the same species and size as originally planted.
8. Contractor shall restake, tighten, repair guys, and reset to proper grades or upright position, any plants that are not in their proper growing position.
9. As it becomes evident that certain lawns and ground covers are not uniformly or properly established, replant the areas immediately with the same plants and quantity as specified for the initial planting. Maintain the 90 percent coverage of healthy, actively growing grass and ground covers.

C. Invasive Plant Species Control

1. Large weeds can be removed by hand, and hand removal may be the only method possible if a large weed has invaded a desired plant to the point where the weed cannot be controlled thorough chemical application. Short weeds in grass areas can be controlled by cutting/mowing the grass areas frequently.
2. If using chemical control, apply post-emergence herbicides to spot treat weeds. Do not apply post-emergence herbicides using a general broadcast method. Ensure that the post-emergence herbicide will not kill desired plant species, and/or control overspray to prevent death of desired plant species.

3. Follow the manufacturer's advice and instructions carefully. Note that by law, herbicide control may only be undertaken using chemicals registered for specific weeds and situations. If spraying near waterways, check that the appropriate chemical is used. Also, if spraying near waterways, the appropriate BMPs shall be implemented to prevent the discharge of herbicides to State waters. Refer to Sections 2.06, 3.05, 3.06 and 4.14 for application of herbicides.

D. Insect Control

1. When using insecticides, where at all possible, spot treat affected plant areas. Do not apply insecticides using a general broadcast method. Ensure that the insecticides are used in a controlled fashion to not harm humans and wild animals, and/or control overspray to prevent excessive distribution of insecticides.
2. Follow the manufacturer's advice and instructions carefully. Note that by law, insecticide control may only be undertaken using chemicals registered for specific insects and situations. If spraying near waterways, the appropriate BMPs shall be implemented to prevent the discharge of pesticides to State waters. Refer to Sections 2.07, 3.13 and 4.14 for application of pesticides.

4.12 ROADWAY AND TRAIL MAINTENANCE:

- A. If adding aggregate to roadway or trail, compact the aggregate with two passes of a roller. Aggregate will be applied to a minimum depth of two inches for the full width of the roadway or trail.

4.13 SOIL NAIL WALL MAINTENANCE:

- A. Brush/scrape areas to be repaired prior to patching to remove dirt and other loose material. Patch wall with recommended grout mixture. Apply epoxy bonding agent to repair area prior to filling with grout mixture. Add colorant to the grout mixture as needed, or stain surface of patch, to match original color. Sculpt patch as needed to match original finish.

4.14 BEST MANAGEMENT PRACTICES IN THE USE OF HERBICIDES AND PESTICIDES:

- A. Herbicides:
  1. Scout areas for weeds and match the management approach to the weed problem. Determine whether weed control will result in significant benefits. Carefully match weed control options,

including non-chemical control, to weed pressures. Use herbicides only in situations where they are necessary and will be cost-effective. Use herbicides with long-lasting effect (residual control) only in areas that have high densities of target weeds. Consider post-emergent weed control alternatives.

2. Evaluate reduced or split herbicide application rates. Banding can significantly reduce herbicide inputs. Use split applications to reduce the amount of herbicide loss in runoff during rains. Consider using the lowest labeled rate in a rate range. Start on a small area to test what works best. Be prepared for follow-up weed management including post-emergent herbicide application and mechanical weed control.
3. When the timing of application and the product label allow, apply herbicides at the proper times to avoid rainfall and reduce runoff losses.
4. Evaluate surface drainage patterns and establish buffer zones for streams. Consider herbicides that have low loss ratings for runoff, or consider non-chemical (mechanical) weed control methods in sensitive areas.
5. Determine the depth to groundwater and consider protective practices in vulnerable areas. Consider herbicides that have low loss ratings for leaching, or consider non-chemical (mechanical) weed control methods in sensitive areas. Follow label requirements or recommendations where water tables are shallow.
6. Rotate herbicide modes of action (chemistry). Avoid more than two consecutive applications of herbicides with the same mode of action (chemistry) to the same area. Evaluate this practice in the context of other effective control practices in the management system (e.g., mechanical weed control, field scouting, etc.).
7. Consider precision application of herbicides. Precision application of herbicides (spot spraying or use of variable rate technologies) is based on weed scouting and variation in soil properties (soil organic matter and texture). Adjust application rates according to weed densities and soils information.
8. For irrigation, implement a water management scheduling plan that uses a soil probe, rain gauge, daily crop water use estimations and/or a soil water balance worksheet to reduce overwatering.

B. Pesticides:

1. Promote tolerance to pests by providing grasses and plants with proper amounts of nutrients and water, as well as soil conditions that favor rapid establishment and vigorous growth.
2. Use disease-free and weed-free grass seed to prevent diseases and weeds from being introduced. Minimize moisture conditions optimum for disease development by carefully managing irrigation water applications. Use good sanitation practices to remove soil, crop residues, weed seeds and diseases from equipment before moving to other areas.
3. Scout areas to properly identify pest conditions and beneficial organism activity. Assess pest population levels, stage of development and potential for damage. Determine stage of plant growth and plant condition when evaluating the need for, timing and effectiveness of post-emergence pest controls. Observe other conditions, such as fertility problems and soil compaction, which may influence the need for action, as well as the type of action needed. Consider economic injury levels and economic treatment thresholds when determining whether control is necessary. Select appropriate control techniques, considering effectiveness, cost and environmental impact. Control techniques may be biological, chemical or mechanical. An effective pest management program may include aspects of one or all of these techniques.
4. Consider mechanical control techniques to manage pests. Use tillage practices to bury diseased plants when appropriate.
5. Always read and follow all product label directions and precautions, appearing on (or included with) the pesticide containers. Read and follow local, state and federal regulations regarding pesticide application procedures, including posting and area re-entry restrictions for treated areas. Pesticides cannot be applied within State waters unless an Individual NPDES permit is obtained from the "CWB". Applicators must know the exact location of the area to be treated, as well as the potential hazard of spray drift or subsequent pesticide movement to surrounding areas. Avoid spray drift. Only pesticides labeled for chemigation may be used in an irrigation system. All chemigation systems must be fitted with effective anti-siphon devices, or check valves to prevent backflow into water supplies, as detailed in local and State regulations.
6. Calibrate equipment properly before mixing and loading pesticides, and recalibrate periodically and whenever the type of

nozzle is changed. Replace worn nozzle tips, cracked hoses and faulty gauges. Time application in relation to existing soil moisture, anticipated weather conditions and irrigation schedules to achieve the greatest product performance and reduce potential for off-site transport, including timing pesticide applications to avoid high-energy rainfall shortly after application. Apply pesticides uniformly across the target area (except in situations where variable rate technology is being used). Use the lowest appropriate rate to minimize pest resistance. Band apply or spot treat where appropriate.

7. Apply pesticides where appropriate to minimize surface runoff. Avoid pesticide applications before or during rainfall to reduce runoff losses. Establish buffer zones adjacent to streams where pesticides will not be used and consider mechanical pest control in these areas.
8. Minimize pest resistance by rotating pesticides used. Avoid repeated use of pesticides having similar modes of action
9. Consider pesticide characteristics that minimize potential to move off-site into ground or surface waters include low water solubility, short half-life and strong adsorption capabilities (attraction to soil particles). Evaluate area susceptibility to the potential for surface or ground water contamination.
10. Select the correct pesticide and rate for the pest spectrum present. See pesticide label for details. Consider soil texture, organic matter and soil pH when selecting soil-applied pesticides and application rates.

#### 4.15 EFFECTIVENESS MONITORING:

##### A. Channel Morphology and Hydraulics:

1. The following cross-sections will be surveyed, using standard surveyor equipment and techniques, as follows:

C r o s s - S e c t i o n Name	Gulc h	Channel Station As Indicated on the Plans	Point Spacing Along Cross-Section
G2CS1	2	0+26.25	Every 5 feet and break points across width of work area.
G2CS2	2	1+00.00	Every 5 feet and break points across width of work area.

G2CS3	2	2+50.00	Every 5 feet and break points across width of work area.
G2CS4	2	3+25.00	Every 5 feet and break points across width of work area.
G2CS5	2	4+00.00	Every 5 feet and break points across width of work area.
G2CS6	2	4+50.00	Every 5 feet and break points across width of work area.
G2CS7	2	5+50.00	Every 5 feet and break points across width of work area.
G2CS8	2	7+50.00	Every 5 feet and break points across width of work area.
G3CS1	3	0+03.59	Every 5 feet and break points across width of work area.
G3CS2	3	1+00.00	Every 5 feet and break points across width of work area.
G3CS3	3	2+50.00	Every 5 feet and break points across width of work area.
G3CS4	3	3+50.00	Every 5 feet and break points across width of work area.
G3CS5	3	Outlet Pond 3	Every 5 feet and break points across width of work area.
G3CS6	3	Outlet Pond 2	Every 5 feet and break points across width of work area..
G4CS1	4	0+00.00	Every 5 feet and break points across width of work area.
G4CS2	4	0+25.00	Every 5 feet and break points across width of work area.
G4CS3	4	0+75.00	Every 5 feet and break points across width of work area.
G4CS4	4	1+50.00	Every 5 feet and

			break points across width of work area.
G4CS5	4	2+00.00	Every 5 feet and break points across width of work area.

The cross-section surveys shall indicate the edge of water to determine if water is flowing in only the design channel. If water is found to be flowing along flow paths other than, or in addition to, the design channel, this fact shall be recorded in field notes. In addition, at least four reference photographs shall be taken along each cross-section, depicting the banks and upland areas on each side of the stream (photographs 1 and 2), the channel upstream of the cross-section (photograph 3), and the channel downstream of the cross-section (photograph 4).

2. A longitudinal profile survey of each gulch channel centerline (Gulch 2, 3 and 4) will be performed, using standard surveyor equipment and techniques, starting from the 0+00.00 station of each gulch channel until the end of the channel stationing as depicted on the plans, and along the centerline of Ponds 1 through 4. Spacing of points shall be every 5 feet and break points.
3. The first (baseline) cross-section and longitudinal profile survey for each stream system (i.e., Gulch 2, Gulch 3, and Pila'a Stream) shall occur within thirty (30) days after the completion of: Task 55 (Remove Bypass/Diversion Pipe) for Gulch 2; Task 42 (Bypass Pipe and Impoundment Removal) for Gulch 3; and Task 73 (Remove Bypass Line and Impoundment) for Pila'a Stream. Subsequent surveys will be performed at six-month intervals from the baseline survey date until the end of a two-year monitoring period beginning at the conclusion of whichever of the following Tasks is completed last<sup>1</sup>:
  - a. Task 56 (Excavation/Embankment to Form New Stream Channel – Phase 2) for Gulch 2;
  - b. Task 42 (Bypass Pipe and Impoundment Removal) for Gulch 3; or
  - c. Task 73 (Remove Bypass Line and Impoundment) for Pila'a Stream (Gulch 4).

#### B. Vegetation Monitoring:

<sup>1</sup> Corrective action that is taken by the Owner, or anyone on behalf of the Owner, to achieve compliance with the terms of this OMMP or the Consent Decree will not extend or re-start the two-year stream monitoring period set forth in this OMMP unless agreed to by the Parties in writing.

1. In order to determine whether an 80-percent plant survival rate (by plant type and within each location) and 90-percent grass coverage is achieved for each of the three stream systems upon which work has been performed, visual sampling is required. The method used will consist of a 9-foot-square area (3-feet by 3-feet) superimposed on the ground (perhaps using a pre-made form) at specific points along the cross-sections mentioned in Section 4.15.A, starting with one sample point on each side of the water body, and then continuing outward in each direction at 15-foot sample point intervals until the edge of the work area is met.
2. Vegetation shall also be monitored in the shoreline remediation area, the Eastern Plateau area, and the area of construction at Kaloko Reservoir to evaluate whether an 80-percent plant survival rate of each plant type (i.e., trees and shrubs) is achieved, and whether 90-percent grass coverage is achieved. Representative photographs depicting the soil nail wall and shoreline remediation area, the Eastern Plateau area, and the area of construction at Kaloko Reservoir area shall be taken at fixed points.
3. A baseline survey for each site (Gulch 2, Gulch 3, Pila'a Stream, shoreline remediation area, the Eastern Plateau area, and the area of construction at Kaloko Reservoir) shall be performed within thirty (30) days after vegetation planting is completed at each site. Subsequent surveys shall be performed at 3-month intervals during the first year following the completion of earthwork and vegetation planting at each site, and at 6-month intervals in subsequent years. Vegetation monitoring at the Site shall continue until the end of a two-year period beginning at the conclusion of whichever of the following Tasks is completed last<sup>2</sup>:
  - a. Task 59 (Hydromulch, Landscaping and Temporary Irrigation – Gulch 2 Landscaping and Gulch 2 Road/Trail) for Gulch 2;
  - b. Task 44 (Hydromulch, Landscaping and Temporary Irrigation – Gulch 3 Road/Trail) for Gulch 3;
  - c. Task 45 (Erosion Control Matting, Hydromulch, Landscaping and Temporary Irrigation – Gulch 3 Ponds 5 through 7) for Gulch 3;
  - d. Task 67 (Erosion Control Matting, Hydromulch, Landscaping and Temporary Irrigation – Lakes 1 and 2) for Pila'a Stream (Gulch 4);

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<sup>2</sup> Corrective action that is taken by the Owner, or anyone on behalf of the Owner, to achieve compliance with the terms of this OMMP or the Consent Decree will not extend or re-start the two-year vegetation monitoring period set forth in this OMMP unless agreed to by the Parties in writing.

- e. Task 19 (Hydromulch and/or Grass Planting and Temporary Irrigation – Area C) for Kaloko Reservoir;
- f. Task 21 (Hydromulch and/or Grass Planting and Temporary Irrigation – Area D) for Kaloko Reservoir;
- g. Task 26 (Hydromulch and/or Grass Planting and Temporary Irrigation) for Eastern Plateau.

C. Wildlife Monitoring:

1. Presence/absence surveys of fish, shrimp, crayfish and damselflies shall be conducted in each stream system. Surveys for fish, shrimp and crayfish shall start from the 0+00.00 station of each stream system and shall continue upstream until the end of the stationing for each stream system, except that, in Gulch 3, surveys will continue until the mauka end of Pond 1. Surveys for fish, shrimp and crayfish shall be at 10-foot intervals along the centerline stationing. Survey methods may include snorkeling, glass box, dip nets, or electroshocking, as appropriate, but must be consistent over time at each site. Surveys for damselflies shall take place on cross-sections at the stations identified in 4.15.A.1 and at the mid-point of each of Ponds 1 through 4 in Gulch 3. Damselfiles shall be sampled on both banks of the streams or ponds from the edge of water and extending 10 feet out along the cross-section. Survey reports shall include site name, station location, habitat type, species list and a count of each species observed.
2. A baseline survey of each stream system shall be performed prior to the start of earthwork on that stream system. Subsequent surveys of each stream system shall be performed within 30 days after earthwork and vegetation planting is completed on that stream system and then at 6-month intervals until the cessation of vegetation monitoring for that stream system pursuant to 4.15.B.3.

END OF PLAN